**REMARKS/ARGUMENTS**

Claims 1-17 are pending in the present application. Claims 1, 2, and 10 have been amended. Claims 1 and 10 are independent claims. The Examiner is respectfully requested to reconsider his rejections in view of the Amendments and the following Remarks.

**Rejection Under 35 U.S.C. § 103**

Claims 1-17 stand rejected under 35 USC § 103(a) as being unpatentable over U.S. Patent No. 6,654,387 to Beser et al. (hereafter Beser) in view of U.S. Patent No. 6,378,000 to Akatsu et al. (hereafter Akatsu). This rejection is respectfully traversed.

Applicant initially wishes to point out that MPEP § 2143.03 sets forth the following requirements for a proper rejection under 35 U.S.C. § 103:

> To establish *prima facie* obviousness of a claimed invention, **all the claim limitations must be taught or suggested** by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "**All words in a claim must be considered** in judging the patentability of the claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

(emphasis added). Furthermore, Applicants wish to direct the Examiner's attention to § 2141.02 of the MPEP, which states:

> A prior art reference must be considered in its entirety, i.e., as a whole, including portions

> that would **lead away from the claimed invention.** *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983)...

As amended, independent claim 1 recites that each network element in a first network utilizes the first protocol addresses to transmit data to other network elements via the first network. Applicants respectfully submit that this feature is neither taught nor suggested by the combination of Beser and Akatsu.

Specifically, Beser discloses a data-over-cable system 10 whereby a cable modem 16 is connected to a data network 28 (e.g., Internet or intranet; see col. 4, line 48). According to Beser, the cable modem may utilize a cable television network 14 as a downstream connection and a Public Switched Telephone Network (PSTN) 22 as the upstream connection (i.e., to transmit data). Alternatively, the cable network may be used as both the upstream and downstream connections. Furthermore, Beser teaches that the cable network is connected to the data network via a Cable Modem Termination System (CMTS) 12. See Fig. 1 and col. 4, line 53 - col. 5, line 55.

It is clear from page 4 of the Office Action that the Examiner relies upon the Address Resolution Protocol (ARP) table of Beser to teach the claimed "table in each network element." Although the Examiner fails to explicitly point out a teaching

of the first network in Beser, Applicants must presume that the Examiner is interpreting the cable network 14 as the claimed "first network" because Beser teaches that the ARP tables are maintained in the CMTS and cable modems in the cable network (see col. 12, lines 60-67; col. 25, lines 21-32).

Furthermore, because Beser teaches that the ARP tables associates the Media Access Control (MAC) addresses of the cable network with the IP addresses of the data network (see, e.g., col. 27, lines 4-29), Applicants presume that the Examiner interprets Beser's data network 28 as the claimed "second network."

However, assuming *arguendo* that the Examiner's presumed interpretation of Beser's cable network as the claimed first network is proper, it is respectfully submitted that Beser fails to teach that network elements transmit data to other network elements via the first network using the first protocol addresses.

Specifically, Beser fails to disclose that the cable modems use the MAC addresses to transmit data destined for the other cable modems in the cable network. On the contrary, Beser teaches that each cable modem is assigned a particular IP address to receive IP data packets from the data network, after the virtual connection is established between that cable modem

and the data network (see col. 11, lines 21). As such, to transmit data packets to other cable modems via the data network, each cable modem will transmit the data via the upstream connection to the data network using the IP address of the destination cable modem. Thereafter, the transmitted data packets are relayed by the data network to the destination cable modem via the corresponding downstream connection.

Thus, Applicants respectfully submit that Beser fails to disclose that the network elements in the first network utilize the addresses corresponding to the first protocol to transmit data to the other network elements via the first network, as required by independent claim 1.

It is respectfully submitted that Akatsu fails to remedy the deficiencies of Beser. Akatsu discloses a home entertainment system 500 in which a home gateway 504 bridges various external services to a network of electronic home entertainment components (VCR, TV, DVD player, etc.) interconnected by a IEEE 1394 bus 568 (Fig. 5; col. 6, lines 3-16). Akatsu discloses an address mapping table that is used for mapping these home entertainment components to their respective services (see Fig. 13; col. 10, lines 33-44).

There is simply no teaching or suggestion in Akatsu that the home entertainment components actually transmit data to each

other. Instead, they only receive signals (services) from the gateway 504. Thus, it is respectfully submitted that Akatsu fails to remedy the deficiencies of Beser discussed above with respect to independent claim 1.

Independent claim 10 recites assigning a Transport Identifier to a plurality of network elements within a SONET ring network. Applicants respectfully submit that this feature is neither taught nor suggested by Beser and Akatsu, as required by for establishing *prima facie* obviousness (see MPEP § 2141.02). In fact, both Beser and Akatsu **teach away** from such a network.

In page 7 of the Office Action, the Examiner asserts that Akatsu discloses data conversion from MPEG to SONET, citing col. 9, lines 4-9. This portion of Akatsu refers to providing MPEG services to the home entertainment system. Specifically, Akatsu discloses that the MPEG data is transmitted from the MPEG network 916 to an access network 924 according to the SONET protocol. Akatsu further teaches that the access network relays the SONET formatted data to the home gateway 504, which in turn, converts the data to IEEE 1394 protocol to be sent to the corresponding home entertainment component. See col. 9, lines 4-26. Akatsu specifically discloses that the home entertainment

components are networked according to a IEEE 1394 data bus (see, e.g., col. 6, lines 3-16).

However, the Examiner relies upon Akatsu to teach "address mapping in a network with identifier assignment" (page 4 of the Office Action). Such application of Akatsu requires that the home entertainment components be interpreted as the "network elements" recited in claim 10. Thus, Akatsu clearly teaches that these home entertainment components are connected in a IEEE 1394-based network and, therefore, clearly **teaches away** from the claimed "plurality of network element within the SONET ring network" in claim 10.

Beser also teaches away from the aforementioned claim feature. Beser specifically discloses that the network elements (i.e., cable modems) are part of a cable television network (see, e.g., Fig. 1).

Accordingly, it is respectfully submitted that Beser and Akatsu fails to teach or suggest each and every feature recited in independent claim 10.

At least for the reasons set forth above, Applicants respectfully submit that independent claims 1 and 10 are allowable. Furthermore, it is respectfully submitted that claims 2-9 and 11-17 are allowable at least by virtue of their

dependency on these claims. Thus, reconsideration and withdrawal of this rejection is respectfully requested.

Claims 16 and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Beser and Akatsu, and further in view of U.s. Patent No. 6,141,690 to Weiman (hereafter Weiman). It is respectfully submitted that Weiman fails to remedy the deficiencies of Beser and Akatsu in relation to independent claims 1 and 10. Accordingly, it is respectfully submitted that claims 16 and 17 are allowable at least by virtue of their dependency on claims 1 and 10. Thus, the Examiner is respectfully requested to reconsider and withdraw this rejection.

**Conclusion**

Since the remaining patent cited by the Examiner has not been utilized to reject the claims, but to merely show the state of the art, no comment need be made with respect thereto.

Entry of this Amendment After Final is respectfully requested. In view of the above amendments and remarks, the Examiner is respectfully requested to reconsider the outstanding rejections and issue a Notice of Allowance in the present application.

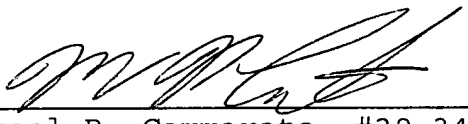
Should the Examiner believe that any outstanding matters

remain in the present application, the Examiner is respectfully requested to contact Jason W. Rhodes (Reg. No. 47,305) at the telephone number of the undersigned to discuss the present application in an effort to expedite prosecution.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By 
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